

FACT SHEET



10th Street Site
Columbus, Nebraska

April 2000

INTRODUCTION

The Environmental Protection Agency (EPA) will construct an air sparging/soil vapor extraction treatment system at the One Hour Martinizing dry cleaning facility, 2262 25th Avenue, Columbus, Nebraska. Construction will begin the week of April 10, 2000.

Soil and ground water samples taken previously by EPA indicate the contamination located at the dry cleaners is a source of the ground water contamination that extends south to 9th Street. The treatment system will remove volatile organic compounds (VOCs) such as perchloroethylene (PCE) and trichloroethylene (TCE) from the soil and ground water in the area of the dry cleaners. Treating the source of contamination is effective in preventing additional contamination to the ground water. The city of Columbus and the owner of the dry cleaners continue to work with EPA to address the contamination.

TREATMENT SYSTEM

Soil vapor extraction is a technology used to remove VOCs in soil and above the water table. The soil vapor extraction system removes VOCs by injecting air through horizontal and vertical wells installed in the soil and the area above the ground water. By applying a vacuum through the underground wells, contaminants are pulled to the surface as vapor or gas and treated with granular activated carbon. Used alone, soil vapor extraction cannot remove contaminants below the water table.

With the addition of an air sparging system, contaminants can be removed from the ground water below the water table. Air sparging consists of pumping air through vertical wells into the ground water to flush the contaminants up into the area where they are collected by the soil vapor extraction system. Neither technique requires the excavation of the contaminated soil. The diagram on the next page shows how the systems work together.

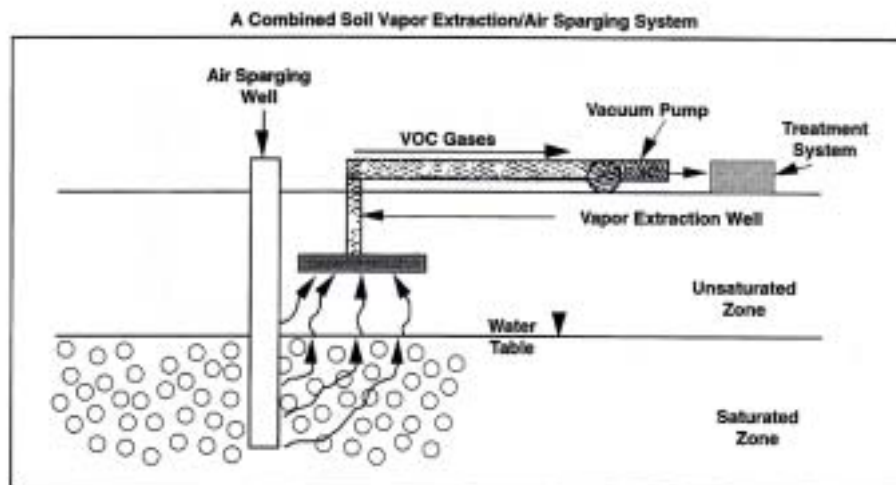
CONSTRUCTION ACTIVITIES

Construction activities are scheduled to begin April 10 and to be completed by the end of June 2000. Although construction activities will begin on the dry cleaner's property, additional construction may take place on properties next to the dry cleaners. The construction work

includes:

- Installation of vertical and horizontal wells. The horizontal wells will be installed at depths of seven feet and range in length from 45 to 50 feet and vertical wells installed to a depth of 80 feet. These wells provide a passage for air to be injected into the ground and for vapor to be extracted out of the ground.
- Construction of an approximately 30' x 50' building to house the injection blower, extraction blower, and granular activated carbon treatment system. The purpose of the building is to protect the weather-sensitive equipment and to reduce noise to neighbors. The building will be located east of the dry cleaners on the west side of 25th Street next to the alley and will be painted to match the dry cleaner's building.

Once the treatment system is operating, sampling will be done periodically to monitor the effectiveness of the system.



ADDITIONAL INFORMATION

Documents related to the 10th Street site are available for public review in the Columbus Public City Library, 2504 14th Street, Columbus, Nebraska.

If you have questions or need further information, please contact:

Diane Huffman, Community Involvement Coordinator
EPA, Region 7, Office of External Programs
901 North 5th Street
Kansas City, Kansas 66101
1-913-551-7003, Toll-free 1-800-223-0425
E-mail: huffman.diane@epa.gov